

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) A binding motif capable of binding to a cytoplasmic protein said motif ~~consisting of comprising~~ the following amino acid sequence:

N-X-X-Y

wherein X is any residue, and Y is a tyrosine residue or an equivalent thereof.

2-7. (Canceled)

8. (Currently Amended) A The binding motif according to any one of claims 1 to 7 of claim 1 wherein the sequence includes comprises the common beta chain (βc).

9. (Currently Amended) A The binding motif according to any one of claims 1 to 8 of claim 1 wherein the Tyr tyrosine residue is equivalent to residue Tyr577 of the common beta chain (βc).

10. (Currently Amended) A The binding motif according to any one of claims 1 to 9 of claim 1 having a modification at a residue equivalent to the Tyr tyrosine residue.

11. (Currently Amended) A The binding motif according to any one of claims 1 to 10 of claim 1 wherein the residue equivalent to the Tyr tyrosine residue is substituted with a Phe phenylalanine residue.

12-13. (Canceled)

14. (Currently Amended) A method of modulating activity in a cell cellular activity in a cell, said method including comprising:

introducing a modification to a binding motif capable of binding to a cytoplasmic protein said motif consisting of comprising the following amino acid sequence:

N-X-X-Y

wherein X is any residue, and Y is a tyrosine residue.

15. (Canceled)
16. (Currently Amended) A The method according to of claim 15 14 wherein the tyrosine residue is equivalent to Tyr577 of the common beta chain (βc).
17. (Currently Amended) A The method according to of claim 16 wherein the common beta chain (βc) is of the GM-CSF/IL-3/IL-5 receptor.
18. (Currently Amended) A The method according to any one of claims 15 to 17 of claim 14 wherein the activity is modulated by introducing a modification of phosphorylation of the Tyr tyrosine residue of the motif.
19. (Currently Amended) A The method according to of claim 18 wherein the phosphorylation is increased by subjecting the cell to a phosphorylating agent.
20. (Canceled)
21. (Currently Amended) A The method according to of claim 18 wherein the phosphorylation is decreased by mutating, substituting, or deleting the Tyr tyrosine residue.
22. (Currently Amended) A The method according to of claim 23 21 wherein the Tyr tyrosine residue is substituted for Phe phenylalanine.
23. (Currently Amended) A The method according to of claim 18 wherein the phosphorylation is decreased by subjecting the cell to an antagonist which inhibits phosphorylation of the Tyr tyrosine residue.

24. (Currently Amended) A The method ~~according to of~~ claim 18 wherein the phosphorylation is decreased by subjecting the cell to a kinase inhibitor to inhibit phosphorylation of the Tyr tyrosine residue.

25. (Canceled)

26. (Currently Amended) A The method ~~according to of~~ claim 25 14 for inhibiting modulating cellular activity in a cell, said method further comprising inhibiting binding of a cytoplasmic protein to the motif.

27-28. (Canceled)

29. (Currently Amended) A The method ~~according to of~~ claim ~~19 or 20~~ 18 for activating modulating cellular activity, said method comprising activating cellular activity by inducing phosphorylation of the Tyr tyrosine residue of the motif.

30. (Currently Amended) A The method ~~according to any one of claims 14 to 29 of claim 14~~ wherein the cellular activity is selected from the group including comprising: cell survival; proliferation; differentiation; mitogenesis; transformation; chemotaxis; motility; enhanced phagocytosis; phagocytosis; enhanced bacterial killing; superoxide production; and cytotoxicity.

31-57. (Canceled)

58. (Currently Amended) A method for screening of cell growth promoting compounds, said method including comprising:

obtaining a cell having a receptor containing a the common beta chain (βc) βe having a Tyr577 residue or equivalent;

inducing phosphorylation of the Tyr a tyrosine residue or an equivalent in a binding motif according to any one of claims 1 to 13 capable of binding to a cytoplasmic protein said motif consisting of the following amino acid sequence:

N-X-X-Y

wherein X is any residue, and Y is a tyrosine residue or an equivalent thereof;

exposing the cell to the compound; and

assessing colony formation of the cells.

59. (Currently Amended) A The method according to of claim 58 wherein the Tyr tyrosine residue is equivalent to Tyr577 of the common beta chain (βc).

60. (Currently Amended) A The use according to method of claim 56 58 wherein the common beta chain (βc) is of the GM-CSF/IL-3/IL-5 receptor.